Rose Black Spot

Dr. Green Thumb
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Rose black spot is perhaps the most devastating disease of roses in Arkansas. This disease is caused by a fungus (*Diplocarpon rosae*) that attacks foliage. The disease can flare-up virtually anytime of the year when the leaves remain wet for a period of six or more hours at a time, such as during frequent rainfall with cloudy days or periods of high humidity. The fungus thrives at 75 to 85 degrees Fahrenheit. Black spot is more of a problem in the landscape than the greenhouse, since moisture and temperature can be controlled in the greenhouse environment. The fungus can attack all types of roses, but tends to be worst on the hybrid tea roses.

The most obvious evidence of this disease is the presence of black leaf spots on the individual leaflets. Spots may vary considerable in diameter, but most reach about ¼ inch and have a "feathery" edge to them. This is a useful characteristic to identify this disease. Infected leaflets develop a yellow halo around the spots. New spots can appear in as little as five days under wet or humid conditions. As spots enlarge, the yellow area becomes more obvious. The leaflet yellowing often leads to premature defoliation and subsequent debilitation of the plant. Black spot often results in a decrease in both bloom number and quality.

The fungus can also infect the canes, but is not as common as the leaf spots. Cane infections appear as small purple to black blister-like blotches on the canes. Infected canes can harbor the fungus during the winter or during periods of adverse weather conditions. Thus, they are an important source of disease initiation in the spring.

Planting resistant varieties is the most effective method of preventing black spot. The degree of resistance may vary with the local environmental conditions. Remove over-wintering sources of the fungus in canes. If you miss the opportunity to prune in February, March is another good time to prune and destroy dead canes. Remove dead rose leaves from under the plant. Use soaker hoses and drip tube irrigation. Fungicide applications may be required in combination with sanitation practices. Apply fungicide containing myclobutanil, triforine, chlorothalonil, or propiconazole during most of the growing season on very susceptible varieties that have a history of chronic Black Spot.

**See Extension Fact Sheet FSA7530

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